Telehealth:
An Effective Strategy in Diabetes Management

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June 17, 2020
Phoenix Indian Medical Center
Definitions

• Telehealth is a broad term that refers to electronic and telecommunications technologies and services used to provide care and services at a distance. This care can be clinical or non-clinical.

• Telemedicine refers specifically to clinical services using live video-conferencing.

• Telephone visits use the telephone and do not use video equipment.
Timeline


• March 11, 2020: Governor Ducey issues a declaration of public health emergency in Arizona.

• March 16, 2020: First telephone visits start at Phoenix Indian Medical Center (PIMC).

• March 17, 2020: Center for Medicare and Medicaid Services (CMS) announces an array of temporary regulatory waivers and new rules that dramatically change telehealth services.
Timeline (2)

• March 20, 2020: Standard operating procedure rolled out for Telemedicine (video) visits for all ambulatory clinics.

• March 23, 2020: Trial with telemedicine visits with three Primary Care Medicine Clinic (PCMC) providers.

• March 23, 2020: First telemedicine visit successfully occurs in PCMC.

• March 27, 2020: The Indian Health Service (IHS) temporarily approves any public-facing telecommunications platform for telemedicine use. Examples: Apple FaceTime, Skype, WebEx etc.
Timeline (3)

- March 19, 2020: All clinic appointments and elective surgeries cancelled.
- March 30, 2020: Governor Ducey issues stay-at-home order.
- April 6, 2020: Nutrition services initiates telemedicine services.
- April 10, 2020: Diabetes Education initiates telemedicine services.
CMS Expansion for Telehealth Services

• Limitations removed on certain types of clinical practitioners that can provide Medicare telehealth services

• Hospitals may bill for services provided remotely including when the patient is at home

• Video requirement waived for certain telephone evaluation and management services

• Increased payments for telephone visits to match payments for similar office and outpatient visits
PIMC Telemedicine Platform: CISCO

• Patient Requirements:
  • Email address or phone number (new process)
  • Computer with audio, video, and microphone capability, or
  • Smart phone with camera and microphone
  • Wi-Fi or unlimited data plan (charges may be incurred with limited data plans)
  • Private location
  • Verbal consent
Process: CISCO (1)

- Providers:
  - Log into CISCO (username/password)
  - Set up a meeting space in a virtual exam room
  - Send meeting space invitation to the patient
  - Join meeting space at scheduled appointment time
  - Await patient “arrival”
Process: CISCO (2)

• Your patient receives an email with an invitation link to the meeting space
• Patient is prompted to “join online meeting” and enter their name
• Patient is prompted to allow for camera/video and microphone functions
• Patient enters the meeting space
Process: CISCO Rules of Engagement

• A separate, unique appointment invitation link must be sent for each patient encounter
• Verify identity of your patient at the beginning of each encounter
• Verify uninvited participants are not present
• *Do not* record any audio or video of the encounter
• Inform your patient of data rates
Phoenix Indian Medical Center (PIMC)  
*Estimated* Data: Telehealth Visits

<table>
<thead>
<tr>
<th>Month</th>
<th>Count</th>
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<tbody>
<tr>
<td>March</td>
<td>140</td>
</tr>
<tr>
<td>April</td>
<td>2,832</td>
</tr>
<tr>
<td>May</td>
<td>4,262</td>
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</table>
## Primary Care Medicine Telehealth

**Estimated Data**

<table>
<thead>
<tr>
<th>Month</th>
<th>Providers Telemedicine</th>
<th>Providers Phone</th>
<th>Diabetes Education Telemedicine</th>
<th>Diabetes Education Phone</th>
<th>Nutrition Services Telemedicine</th>
<th>Nutrition Services Phone</th>
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<tbody>
<tr>
<td>March</td>
<td>12</td>
<td>46</td>
<td>0</td>
<td>46</td>
<td>0</td>
<td>0</td>
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<tr>
<td>April</td>
<td>49</td>
<td>1,962</td>
<td>20</td>
<td>72</td>
<td>18</td>
<td>0</td>
</tr>
<tr>
<td>May</td>
<td>38</td>
<td>2,147</td>
<td>10</td>
<td>36</td>
<td>14</td>
<td>37</td>
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</tbody>
</table>
Advantages of Telehealth

- Time saving
- Cost effective for patients (gas, transportation)
- Patient’s do not forget their meters at home
- Patient comfort in home or other setting
- Ease with medication reconciliation
- Environmentally beneficial
- Diversification of room utilization in clinic space especially with use of telework
Advantages of Telehealth (2)

• Limits patient and provider exposure to pathogens/infectious disease
• Human connection during “all things COVID”
• Establishes a sense of normalcy
• Decrease in no-show rates
• Family involvement
• *Gratitude*
No-Show Rates
Challenges

• Connection problems
• Audio and video issues
• Patient instructions
• Schedules/clinic flow
• Inability to complete same day labs and point of care testing
Challenges (2)

• Inability to perform physical exam including foot and eye exams
• Visits take more provider time
• Obtaining accurate data regarding telehealth visits
Uses of Telehealth in Diabetes Management

- New onset diabetes education/management
- New meter education
- New medication initiation: oral medications, injectable medications
- Medication dose adjustment
- Hypoglycemia treatment/education
- Nutrition education
- Diabetes prevention education
Telehealth: Diabetes Education
Pre-Visit Planning

• Email sent with appointment reminder
• Educational handouts
• Overview of what to expect
• Review of chart
Case Study: 49-Year-Old Male

- Past Medical History:
  - Diabetes Mellitus Type 2
  - Hypertension
  - Morbid Obesity
  - Hypertriglyceridemia
  - Asthma
  - Gastroesophageal Reflux Disease
  - Remote History of Polysubstance Abuse and Alcoholism

- Longstanding history of intermittent compliance with medications, visits, and labs

- Past Surgical History: Laparoscopic Cholecystectomy, Repair of Umbilical Hernia
Case Study: 49-Year-Old Male (2)

- Allergies: Lisinopril
- Medication regimen:
  - NPH insulin 55 units S.Q BID daily
  - Metformin 1000 mg P.O bid daily
  - Regular insulin (remote past)
- BMI: 36.83
- A1c Results:
  - 11/2018: 8.4%
  - 4/2019: 8.1%
  - 9/2019: 9.1%
  - 12/2019: 8.5%
Case Study: 49-Year-Old Male (3)

• Discussion with PCP regarding liraglutide treatment in September 2019
• Patient initially agreeable to liraglutide but changes his mind
• Additional negotiation and discussions regarding liraglutide during December 2019 PCP visit
• Pandemic starts, lockdown in Arizona March 30, 2020
Case Study: 49-Year-Old Male (4)

• Telephone visit with PCP 4/24/20: patient committing to start liraglutide
• Telemedicine visit with Diabetes Education (DCOE) 4/29/20: initiation of liraglutide
• Telephone follow-up visits for medication adherence, evaluation of meter readings, hypoglycemia education, and medication dose adjustment
Case Study: 49-Year-Old Male (5)

• 5/7/2020 call to clinic: “This new medication Victoza and Metformin that my provider had me start is too good.”

• Telephone visit conducted on 5/7 with additional DCOE follow up visits on 5/13 and 5/19.
Case Study: 49-Year-Old Male (6)

- PCP follow-up telephone visit May 22, 2020
- 10 lb. weight loss
- Decrease in triglycerides from 477 (12/2019) to 202 (5/ 2020)
- Patient no longer needing insulin
- A1C: 7.4%
Lessons Learned

• Offer telemedicine to all patients regardless of age
• Discovered our 97-year-old patient FaceTimes regularly with family and friends
• Family involvement
• Elderly welcomed new learning in several instances
• Patients under 50 years of age are tech savvy but often declined telemedicine visits in spite of access to technology
Lessons Learned (1)

• Keep good data. Pull data regularly on visits to know your volume and target possible errors in data entry, scheduling, coding or billing.
• Important to challenge ourselves and our patients.
• Be patient and flexible.
• You will spend time teaching your patients new technology.
• **We can do this!**
New Daily Cases Are Rising in 22 Places, Including the Following

Source: Center Systems Science and Engineering at Johns Hopkins University

<table>
<thead>
<tr>
<th>State</th>
<th>Average This Week</th>
<th>Per 100K</th>
<th>% Change vs. 2 Weeks Ago</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alaska</td>
<td>14 new cases/day</td>
<td>2 per 100K</td>
<td>+367%</td>
</tr>
<tr>
<td>Arizona</td>
<td>1,078 new cases/day</td>
<td>15 per 100K</td>
<td>+219%</td>
</tr>
<tr>
<td>Oregon</td>
<td>89 new cases/day</td>
<td>2 per 100K</td>
<td>+141%</td>
</tr>
<tr>
<td>Kentucky</td>
<td>204 new cases/day</td>
<td>5 per 100K</td>
<td>+124%</td>
</tr>
<tr>
<td>South Carolina</td>
<td>379 new cases/day</td>
<td>7 per 100K</td>
<td>+114%</td>
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<tr>
<td>Puerto Rico</td>
<td>168 new cases/day</td>
<td>5 per 100K</td>
<td>+113%</td>
</tr>
<tr>
<td>Idaho</td>
<td>50 new cases/day</td>
<td>3 per 100K</td>
<td>+108%</td>
</tr>
<tr>
<td>Utah</td>
<td>332 new cases/day</td>
<td>10 per 100K</td>
<td>+105%</td>
</tr>
<tr>
<td>Arkansas</td>
<td>328 new cases/day</td>
<td>11 per 100K</td>
<td>+89%</td>
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<tr>
<td>Tennessee</td>
<td>634 new cases/day</td>
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<td>+76%</td>
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<td>Florida</td>
<td>1,153 new cases/day</td>
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<tr>
<td>Texas</td>
<td>1,553 new cases/day</td>
<td>5 per 100K</td>
<td>+50%</td>
</tr>
</tbody>
</table>
New Cases Per Day in Arizona and New York

Source: Center for Systems Science and Engineering at Johns Hopkins University
It’s Not Just COVID-19

• Protests
• Lockdown
• Curfews
• Racism
• Police Brutality
• Anger
• Fear
• Isolation
Telehealth...

- *Is human connection*
- *Improves health*
- *Saves lives*
Special Thanks To...

• Naomi Hixson, Au.D., CCC-A/SLP, Acting Telehealth Coordinator (PIMC)

• Nick Laughton, PharmD, MPH, BCPS, LCDR-USPHS, Health Systems Specialist (Phoenix Area Office)
Contact Us

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• Leigh.Shovestull@ihs.gov
References

• John Hopkins University, Center for Systems Science and Engineering

• Hixson, Naomi. Standard Operating Procedure for Phoenix Indian Medical Center Telehealth During the COVID-19 Public Health Response. June 2020


Working Together to Provide Better Access Through Telehealth

Tools and resources to support telehealth implementation in Indian Health programs in response to COVID-19 and beyond

• Join the Conversation on the Telehealth Listserv
  • https://www.ihs.gov/listserv/topics
  • Type telehealth into the search box
  • Select Telehealth and mHealth to subscribe
  • Use the listserv to ask questions and share experiences on any aspect of telehealth with colleagues across the Indian Health Service

• And Coming Soon…
  • Telehealth Toolkit
    • Pulling together resources from within Indian Health and other systems/organizations
    • With RPMS/EHR–specific guidance, tools, and resources
  • Telehealth Call Series
    • We’ll get into the nuts and bolts of using telehealth to improve access to care and learn from each other